Chemistry Majors Recognized at Awards Ceremony

Over two dozen outstanding chemistry majors were recognized for their academic achievements at the second annual Chemistry Department Awards ceremony, held on Friday, April 16 at 4 p.m., the kick off to Parent’s Weekend. We were delighted that several parents and family members were in attendance. The awards ceremony was followed by a reception.

The CRC Outstanding First Year Chemistry Course Award, presented to an outstanding student in majors or honors first-year chemistry, went to Kyle Solomon. Dr. Gabbai was to present the award.

The Outstanding Achievement in Organic Chemistry, presented to an outstanding student in majors or honors organic chemistry, was awarded to Stacey Moller. Dr. Romo presented the award.

The Undergraduate Award in Analytical Chemistry, presented to an outstanding student in CHEM415 and CHEM434, was awarded to Sandra Fiorentini. Dr. Batteas presented the award.

The ACS Undergraduate Award in Inorganic Chemistry, presented to a student who has performed with excellence in inorganic chemistry courses and research, was awarded to Aaron Hollas. His research advisor, Dr. Ozerov, presented the award.

The ACS Leadership Award, presented to the student who has shown crucial leadership for the Student Affiliates, was awarded to Kathy Webb. The award was presented by Dr. Tiner, the ACS advisor.

The Hypercube Scholar Award, presented to an outstanding chemistry major who shows promise for graduate studies, was awarded to Masato Hirai. The award was presented by his research advisor, Dr. Watanabe.

Chemistry Department Achievement Awards are presented to outstanding senior and junior chemistry majors. These awards were presented by our Department Head, Dr. Russell. These awards went to the following seniors: Kayla Lammt, Trey Patterson, Jamie Wheeler, and Mark Zobeck. The following juniors also received awards: Jennifer Erchinger, Kristin Jang, Ivey Royall, Abby Sisco, and Felix Yu.

Jaan Laane Academic Achievement Awards, a new endowed award presented to the two most outstanding juniors, was awarded to Sandra Fiorentini and Merid Haile. Dr. Laane presented these awards.

The Merck Index Award, presented to the most graduating seniors who are entering professional school in the health professions, was awarded to Amanda Cooke and Katherine (Popelka) Kelly. These awards were presented by Dr. Gaede.

The Hugh McLean, Jr. Award, presented to a student who has shown unusual perseverance in pursuit of his or her degree, was awarded to Hannah Werner. This award was presented by Dr. Gaede.

The Chemistry Department Outstanding Undergraduate Award, presented to the most outstanding graduate, went to Justin Law. Justin graduated in December and was unable to attend to accept his award.

Our departmental scholarship award winners were also recognized.

The 2009-10 Dow Aggies Scholarships were Kevin Arendt, Alice Cole, Scott Johnsgard, and Ian Kissell.

The 2009-10 The George C. Bauer Scholarship recipient was Allison Williams.

The 2009-10 Sharon Merritt Bircher Scholarship recipient was Jamie Felps.

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**Dr. Joe Zhou Receives DOE Grant**

Dr. Hongcai “Joe” Zhou, professor of chemistry at Texas A&M University, has been selected as one of 37 scientists nationwide to share in a total of $106 million in new grants through the United States Department of Energy intended to help reshape the country’s energy future.

The grants, announced April 29 by U.S. Vice President Joe Biden and Secretary of Energy Steven Chu, will fund a variety of innovative research initiatives with the power to dramatically improve the way the country uses and produces energy. Funded through DOE’s Advanced Research Projects Agency-Energy (ARPA-E), the $106 million effort will support projects that could produce advanced biofuels more efficiently from renewable electricity instead of sunlight; design completely new types of batteries to make electric vehicles more affordable; and remove the carbon pollution from coal-fired power plants in a more cost-effective way. The awards are part of an overall $100 billion investment the American Recovery and Reinvestment Act (ARRA) is making to create jobs and drive economic growth through innovation, science and technology.

Dr. Zhou, who joined the TAMU faculty in 2008, is an expert in the design of metal-organic framework (MOF) materials, considered one of the most promising new classes of “designer” microporous materials to be developed in the past 20 years. His proposal, “Stimuli-Responsive Metal-Organic Frameworks for Energy-Efficient Post-Combustion Carbon Dioxide Capture,” was developed in collaboration with Dr. Hae-Kwon Jeong and Dr. Perla B. Balbuena in the Department of Chemical Engineering.

Zhou’s research focuses on the use of new MOF materials as carbon dioxide sorbents that could be finely controlled to improve their selectivity in absorption of carbon dioxide, thereby reducing the energy required to do so. He and his team believe the technology would greatly reduce carbon emissions in everything from transportation devices to power plants, creating jobs in clean-energy-related companies and factories.

The project was one of 37 selected – the only statewide – from 300 full applications chosen from an original pool of more than 3,600 initial concept papers submitted to the DOE. “It definitely feels very motivating to be selected,” Zhou said. “We are very proud, but we also feel very responsible to do excellent work in this area and to really try and make a difference in the world.”

Zhou earned his Ph.D. from Texas A&M in 2000 under legendary inorganic chemist Dr. F. Albert Cotton. Dr. Zhou taught CHEM362, Descriptive Inorganic Chemistry, this semester. He has welcomed many undergraduate students into his research laboratory to participate in this exciting research.

This article was excerpted from a College of Science article by Chris Jarvis. Interested in additional news and updates from the Texas A&M College of Science? Send an e-mail to "communications@science.tamu.edu" to subscribe to our new "discover-e" electronic newsletter, or become our facebook fan at www.facebook.com/tamu.science!

**Dr. Keeney-Kennicutt Named a 2010 Piper Professor**

Dr. Wendy L. Keeney-Kennicutt, senior lecturer in the Department of Chemistry at Texas A&M University, has been named a 2010 Piper Professor.

The Piper Professor Award, which includes a certificate, gold pin and $5,000 honorarium, was established by the San Antonio-based Minnie Stevens Piper Foundation in 1958 to annually recognize 15 outstanding college professors across Texas. Selection is by invitation only and is made on the basis of nominations submitted by each college or university, public and private, statewide.

Keeney-Kennicutt, who joined the Texas A&M faculty in 1984 after earning her Ph.D. in chemical oceanography from TAMU, is widely respected by colleagues and students alike for her excellence in teaching and engagement. In 2009, she became the first non-tenured faculty member to be named a Presidential Professor for Teaching Excellence, Texas A&M’s highest honor bestowed for life in recognition of teaching prowess. In addition to a 2010 Student Led Award for Teaching Excellence (SLATE) from the Texas A&M University System, she has been recognized by The Association of Former Students with the Distinguished Achievement Award for Teaching at both the university (2001) and college (1991) (continued on page 3)
Opportunities

Eric Hendrickson sent in news of this opportunity: The GE Water Analytical Lab in The Woodlands is fortunate enough to be going through a hiring cycle. They currently have one position posted that would be applicable to undergrads. This position is for a materials scientist; however, chemists with SEM experience are strongly considered, as this is the position I was hired into here at GE. Candidates can apply directly online at www.gecareers.com and search for the job #1175731. This position is for SEM and Deposit Analysis laboratories. We should also have positions posting in the IC lab and GC labs within a few weeks so folks just need to keep checking the website. I cannot accept any applications or resumes, but I am more than willing to answer any questions that folks might have. Just have them shoot me an email (eric.hendrickson@ge.com).

Jennifer Sonne sent in news of this opportunity. A biofuels company named KiOR is hiring lots of people with backgrounds in chemistry (both BS and PhD). The location is in Pasadena, Texas, which is not far from Houston. The pay is competitive with bigger companies and the atmosphere is very friendly. It is cutting-edge technology that turns plant biomass into biocrude oil. Applicants may send their resumes and cover letters to careers@kior.com.

Dr. Keeney-Kennicutt a 2010 Piper Professor

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levels, as well as by Gamma Sigma Delta (honor society for agriculture) with its Outstanding Teacher Award (1998).

During her 26-year career at Texas A&M, Keeney-Kennicutt has worked in a variety of science-related professions, from research scientist to laboratory supervisor. For the past 11 years, she has served as primary organizer of Texas A&M's Chemistry Open House and Science Exploration Gallery, hosted each fall by the Texas A&M Local Section of the American Chemical Society in conjunction with the Texas A&M Department of Chemistry as part of National Chemistry Week.

This article was excerpted from a College of Science publication by Shana K. Hutchins. Interested in additional news and updates from the Texas A&M College of Science? Send an e-mail to "communications@science.tamu.edu" to subscribe to our new "discover-e" electronic newsletter, or become our Facebook fan at www.facebook.com/tamu.science!

Chemistry Majors Recognized

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The Dr. Minoru Tsutsui Memorial Scholarship recipients were James Hammer and Christopher Jones.

The 2009-10 Dr. Herman A. Liebhabsky Scholarship recipients were Ryan Fort, Katherine Popelka, and Daniel Sanders.

The 2009-10 Eileen and Harry Lewis Scholarship winners were Ivey Royall and Abby Sisco.

Hach Scientific Foundation Scholarship winners were Whitney Becker, Jessica Hemann, and Kelli Pearce.

The Dr. David W. Lipp ’66 Memorial Endowed Scholarship winners for 2009-10 were Michael Moulder, Auburn James, Katherine Richards, and Louis Robinett.

The 2009-10 Dawn C. ’96 and David A. ’88 Mason Scholarship in Chemistry was awarded to Cullan Lucas.

The Emile A. Schweikert Endowed Scholarship for 2009-10 went to Andrew Tindall and Kathy Webb.

The Connie G. and Otto F. (Pete) Schumm Endowed Scholarship in Chemistry went to Masato Hirai, Sean Lau, Allen Lunsford, and Felix Yu. The Dr. John L. Hogg Endowed Scholarship in Chemistry was awarded to Nicole Reusser.

We are very fortunate to have so many awards and scholarships to reward our high achieving students. Our deep gratitude goes out to all the donors who have made this possible. Congratulations to all scholarship and award winners!

All of our chemistry majors are routinely considered for scholarships at the end of the academic year. Some scholarships require a formal application. Please see Ms. Warren in the Advising Office for more information.
**Good News!**

**Ulises Rangel (BS 2013)** was one of only 17 out of approximately 350 applicants selected to attend Procter & Gamble’s “2010 Research Your Future in Science Seminar” at P&G’s global headquarters in Cincinnati, OH from August 2-6.

**Yen-Nan Lin (BS ’12)** was one of four Texas A&M University undergraduates have been honored by the Barry M. Goldwater Scholarship and Excellence in Education Program. He was selected as an Honorable Mention. This is the first time since 2001 that all four University nominees were recognized in the Goldwater competition.

Yen-Nan, who attended the Texas Academy of Math and Science. A Regents Scholar, Lin is a Chemistry major whose primary research interest is neural engineering. In the long-term, he will focus on neural cell regeneration and degeneration, with application towards neurological disorders such as dementia, spinocerebellar ataxia, and dystonia. He also volunteers with Brian’s House, a non-profit childcare program for children with AIDS and other illnesses, and has served as a camp counselor at Camp Summit, a summer camp for children with mental disorders.

The Goldwater Scholarship is the United States’ premier undergraduate award for the fields of math, science, and engineering. In this year’s competition, 278 sophomores and juniors out of a pool of over 1,100 students were selected as Goldwater Scholars. To date, 37 Texas A&M University students have been honored as Goldwater Scholars.

**Dr. Kevin Burgess** received a 2010 Distinguished Achievement Award in Research from Texas A&M University and The Association of Former Students. The 2010 Distinguished Achievement Awards were formally presented at 1:30 p.m. April 29 during ceremonies in Rudder Theater. In recognition of their achievements, each recipient will receive a $4,000 cash gift, an engraved watch and a commemorative plaque. Dr. Burgess’ research interests are in the areas of Organic synthesis and biophysical chemistry.

**Welcome to Recently Declared Chemistry Major**

Alex Salinas

**Watch for it!**

May and August Graduating Senior Autobiographies will appear in the first Fall issue of *Orbitals.*